

# UNITED STATES PATENT AND TRADEMARK OFFICE



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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.		
10/600,153 06/19/2003		Guenter Herr	HOE-763	5804		
20028	20028 7590 11/24/2004			EXAMINER		
	CE OF BARRY R LIP	CHOI, WII	CHOI, WILLIAM C			
755 MAIN S MONROE,		ART UNIT	PAPER NUMBER			
ŕ			2873			
			DATE MAILED: 11/24/2004			

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application	Application No. Applicant(s)					
Office Action Summary		10/600,153		HERR ET AL.				
		Examiner		Art Unit				
		William C. C		2873				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply								
THE MAILING DA  - Extensions of time mater SIX (6) MONTHS  - If the period for reply  - If NO period for reply  - Failure to reply within  Any reply received by	STATUTORY PERIOD FOR REPLATE OF THIS COMMUNICATION.  Any be available under the provisions of 37 CFR 1.  So from the mailing date of this communication.  Specified above is less than thirty (30) days, a replay is specified above, the maximum statutory period the set or extended period for reply will, by statudate of the office later than three months after the mailing distinct.  See 37 CFR 1.704(b).	136(a). In no even ply within the statute d will apply and will te, cause the applic	t, however, may a reply be tim ory minimum of thirty (30) days expire SIX (6) MONTHS from t ation to become ABANDONED	ely filed s will be considered timel the mailing date of this c O (35 U.S.C. § 133).				
Status								
1) Responsive	1) Responsive to communication(s) filed on 19 August 2004.							
2a)⊠ This action	a)⊠ This action is <b>FINAL</b> . 2b)□ This action is non-final.							
	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.							
Disposition of Clain	ns							
4)⊠ Claim(s) <u>1,4-6 and 8-23</u> is/are pending in the application.  4a) Of the above claim(s) is/are withdrawn from consideration.								
	5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 1.4,5,9,10 and 14-23 is/are rejected.							
	Claim(s) 6,8 and 11-13 is/are objected to.							
8) Claim(s) are subject to restriction and/or election requirement.								
Application Papers								
9) The specification is objected to by the Examiner.								
10)⊠ The drawing(s) filed on <u>19 June 2003</u> is/are: a)⊠ accepted or b)□ objected to by the Examiner.								
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).								
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.								
Priority under 35 U.S.C. § 119								
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> </ul>								
* See the attached detailed Office action for a list of the certified copies not received.  Attachment(s)  1) Notice of References Cited (PTO-892)  4) Interview Summary (PTO-413)								
	on's Patent Drawing Review (PTO-948) ure Statement(s) (PTO-1449 or PTO/SB/08 ate	-,	Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:		O-152)			

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#### **DETAILED ACTION**

#### Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1, 4, 5, 9, 10 and 14-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Samson (U.S. 5,505,725).

In regard to claims 1, 4 and 5, Samson discloses an optical projection system comprising: an optical element for shaping radiation fields emitted from a light guide (column 1, lines 38-45 and column 4, lines 4-6, Figure 3, "32"), the optical element having a radiation-field-shaping region (Figure 3, "32") and a connecting region for the light guide (column 3, lines 57-60, Figure 3, "33"), the connecting region having a connecting area for accepting a front face of the light guide (column 4, lines 16-17, Figure 3, re: left side of "33"), said connecting area being adapted approximately to a diameter of the light guide (Figure 3, "33, 37"), a carrier extending outside said radiation-field-shaping region and adjacent said connecting region (Figure 3, re: outer edges of "32"), said connecting region extending beyond a side of the carrier to form a free standing projection (Figure 3, "33") having the connecting area on an end face of said projection (column 4, lines 16-17, Figure 3, re: left side of "33"), but does not specifically disclose the optical element and carrier being formed in a monolithic body.

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However, Samson does disclose wherein said optical element and connecting region have the same index of refraction (column 3, lines 58-60) and furthermore, it has been held that a recitation where the use of one piece construction instead of structure comprising several parts would merely be a matter of obvious engineering choice. *In re Larson* 144 USPQ 347, 349 (CCPA 1965). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made for the optical element and carrier to be formed in a monolithic body since Samson discloses wherein said optical element and connecting region have the same index of refraction and a recitation where the use of one piece construction instead of structure comprising several parts would merely be a matter of obvious engineering choice.

Regarding claim 9, Samson discloses wherein the radiation-field-shaping region has an area curved in the manner of a lens for radiation field shaping (Figure 3, "32").

Regarding claim 10, Samson discloses wherein the radiation-field-shaping region has a refractive index gradient for radiation field shaping (column 3, lines 57-60).

Regarding claim 14, the radiation-field-shaping region of Samson would inherently have boundary surfaces shaped in such a way that rays reflected on them are substantially not reflected back directly into the light guide, this being reasonably assumed from Samson's disclosure of the concentration of the laser radiation at the immediate distal end of the lens (column 5, lines 7-12).

Regarding claim 15, Samson discloses wherein the radiation-field-shaping element acts in such a way that it does not collimate exactly (column 4, lines 4-7).

Regarding claim 16, the light guide of Samson would inherently be connected to the connecting area of the connecting region such that it is substantially reflection-free, this being reasonably assumed from the precise laser control necessary for laser surgery.

Regarding claim 17, Samson discloses wherein a marking is associated with each connecting region (column 3, lines 61-65, Figure 3, "36").

Regarding claim 18, Samson discloses wherein a heatable material is provided by means of which material in a region of the areas of the light guide and the connecting area which are to be connected can be heated up to effect a connection of the light guide and the connecting area (column 3, line 66 – column 4, line 10, re: epoxy).

Regarding claim 19, Samson discloses wherein a collar of a heatable material by means of which the material in the region of the areas to be connected can be heated up is provided in the region of the areas to be connected (column 3, line 66 – column 4, line 10, Figure 3, "38").

Regarding claim 20, Samson discloses wherein the light guide is provided with a collar of heatable material in the region of its front face (column 3, line 66 – column 4, line 10, Figure 3, "38").

Regarding claim 21, Samson discloses wherein the heatable material can be heated up by absorption of rays (column 3, line 66 – column 4, line 10, Figure 3, "38").

Regarding claim 22, Samson discloses wherein the material can be heated up by laser radiation (column 3, line 66 – column 4, line 3, Figure 10, "38").

Regarding claim 23, Samson discloses wherein the material can be heated up by laser radiation passing through the monolithic body (column 3, line 66 – column 4, line 10, Figure 3, "38").

### Allowable Subject Matter

Claims 6, 8 and 11-13 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: The prior art fails to teach a combination of all the claimed features as presented in claims 6 and 8: an optical projection system as claimed, specifically wherein the monolithic body is held by the carrier, which is separate from the monolithic body.

The prior art fails to teach a combination of all the claimed features as presented in claims 11-13: an optical projection system as claimed, specifically wherein a plurality of individual optical elements is formed in the monolithic body, each optical element having a corresponding radiation-field-shaping region and corresponding connecting area formed on a corresponding connecting region.

## Response to Arguments

Applicant's arguments with respect to claims 1, 4, 5, 9, 10 and 14-23 have been considered but are most in view of the new ground(s) of rejection.

#### Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to William C. Choi whose telephone number is (571) 272-2324. The examiner can normally be reached on Monday-Friday from about 9:00 am to 6 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Georgia Y. Epps can be reached on (571) 272-2328. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

W. C

William Choi Patent Examiner Art Unit 2873 November 17, 2004

> Georgia Epps Supervisory Patent Examiner Technology Center 2800